AMENDMENTS TO THE CLAIMS

1. (currently amended) A process ~~Process~~ for the manufacture of an optical transmission element having at least one optical waveguide ~~with several optical waveguides and~~ with a slot element surrounding the at least one optical waveguide and defining ~~waveguides, which seals~~ an interior space, the process comprising the steps of:

~~where~~ applying a filling compound ~~is applied~~ intermittently to the at least one optical waveguide, ~~waveguides~~ wherein the filling compound is applied in a liquid state~~,~~;

~~the~~ feeding the at least one optical waveguide ~~waveguides are subsequently fed~~ into an extruder to form ~~, where the extruder forms~~ a slot element around the at least one optical waveguide ~~waveguides,~~;

~~where~~ wherein the filling compound expands within the ~~formed~~ slot element, thereby ~~penetrates interstices present in the interior in the cross section level of the transmission element and forms~~ forming a plurality of ~~several~~ dry, compressible elements that are disposed about ~~in its final state, which each surround~~ the at least one optical waveguide ~~waveguides~~.

2. (currently amended) The process ~~Process~~ according to claim 1, wherein the filling compound is selected from the group consisting of polyurethane based materials and silicone based materials ~~polyurethane or silicones being used as the filling compound~~.

3. (currently amended) The process ~~Process~~ according to claim 1, wherein the slot element cross-section is not being changed by ~~during~~ the expanding of the ~~process in it cross section by the expanding~~ filling compound.

4. (currently amended) The process ~~Process~~ according to claim

1, wherein the filling compound begins to expand within the ~~formed~~ slot element ~~beginning to expand only~~ after leaving the extruder~~, preferably only when the slot element is in a rigid state~~.

5. (currently amended) The process ~~Process~~ according to claim 4, wherein a ~~the~~ delay period between applying the filling compound ~~application~~ and the beginning of expansion of the filling compound ~~being set dependent on the pay off speed of the slot element, amounting preferably to at least~~ is between about one second and about ~~a maximum of~~ 300 seconds.

6. (currently amended) The process ~~Process~~ according to claim 1, wherein the expansion of the filling compound is ~~being initiated and/or~~ aided by ~~a supply of~~ heat.

7. (previously presented) An optical ~~Optical~~ transmission element, comprising:
~~with several~~ at least one optical waveguide ~~waveguides~~ being disposed within ~~and with~~ a slot element ~~surrounding the optical waveguides~~, wherein the slot element defines ~~which seals~~ an interior space therein ~~surface;~~
~~with several~~ a plurality of dry and compressible filling elements, which are arranged in the interior space and are formed by material expanding within the interior space, where a defined contact pressure is applied by the filling elements against the slot element and against the at least one optical waveguide ~~waveguides~~ for anchoring them in longitudinal direction of the transmission element and where position changes of the at least one optical waveguide ~~waveguides~~ are possible~~;~~
~~where~~ wherein the filling elements are disposed about ~~each surround~~ the at least one optical waveguide and ~~waveguides,~~ completely fill respective cross-sections of the interior space

of ~~and penetrate interstices between the optical waveguides present in the cross section level of the transmission element and are essentially in all around contact with the optical waveguides and~~ the slot element.

8. (currently amended) An optical ~~Optical~~ transmission element according to claim 7, wherein the filling compound is selected from the group of consisting of polyurethane based materials and silicone based materials ~~the material of the filling elements being made of polyurethane or silicones~~.

9. (currently amended) An optical ~~Optical~~ transmission element according to claim 7, wherein the filling elements are applied to the at least one optical fiber in ~~being made of a material expanding starting from~~ a liquid state.

10. (currently amended) An optical ~~Optical~~ transmission element according to claim 7, wherein a plurality of ~~several separate~~ filling elements are ~~being~~ arranged in the longitudinal direction of the optical transmission element with intermediate interstices therebetween not being occupied by filling elements.

11. (currently amended) An optical ~~Optical~~ transmission element according to claim 7, wherein the filling elements further including a material that ~~containing a medium for sealing, which~~ swells during water penetration.

12. (currently amended) An optical ~~Optical~~ transmission element according to claim 7, wherein the filling elements are formed so ~~being made in such a way,~~ that they can be removed from the at least one optical waveguide ~~waveguides~~ easily and completely without using additional tools.

THAT WHICH IS CLAIMED:

1. Process for the manufacture of an optical transmission element with several optical waveguides and with a slot element surrounding the optical waveguides, which seals an interior space,

- where a filling compound is applied intermittently to the optical waveguides in liquid state,
- the optical waveguides are subsequently fed into an extruder, where the extruder forms a slot element around the optical waveguides,
- where the filling compound expands within the formed slot element, penetrates interstices present in the interior in the cross-section level of the transmission element and forms several dry, compressible elements in its final state, which each surround the optical waveguides.

2. Process according to claim 1, wherein polyurethane or silicones being used as the filling compound.

3. Process according to claim 1, wherein the slot element not being changed during the expanding process in its cross-section by the expanding filling compound.

4. Process according to claim 1, wherein the filling compound within the formed slot element beginning to expand only after leaving the extruder, preferably only when the slot element is in a rigid state.

5. Process according to claim 4, wherein the delay period between application and the beginning of expansion of the filling compound being set dependent on the pay-off speed of the slot element, amounting preferably to at least one and a maximum of 300 seconds.

6. Process according to claim 1, wherein the expansion of the filling compound being initiated and/or aided by a supply of heat.

7. Optical transmission element

- with several optical waveguides and with a slot element surrounding the optical waveguides, which seals an interior space,
- with several dry and compressible filling elements, which are arranged in the interior space and are formed by material expanding within the interior space, where a defined contact pressure is applied by the filling elements against the slot element and against the optical waveguides for anchoring them in longitudinal direction of the transmission element and where position changes of the optical waveguides are possible,
- where the filling elements each surround the optical waveguides, completely fill and penetrate interstices between the optical waveguides present in the cross-section level of the transmission element and are essentially in all-around contact with the optical waveguides and the slot element.

8. Optical transmission element according to claim 7, wherein the material of the filling elements being made of polyurethane or silicones.

9. Optical transmission element according to claim 7, wherein the filling elements being made of a material expanding starting from a liquid state.

10. Optical transmission element according to claim 7, wherein several separate filling elements being arranged in the longitudinal direction of the optical transmission element with intermediate interstices not being occupied by filling elements.

11. Optical transmission element according to claim 7, wherein the filling elements containing a medium for sealing, which swells during water penetration.

12. Optical transmission element according to claim 7, wherein the filling elements being made in such a way, that they can be removed from the optical waveguides easily and completely without using additional tools